
U.S. Department of the Interior • U.S. Geological Survey

MINERAL INDUSTRY SURVEYS

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Chromium, Monthly

CHROMIUM IN JULY 1996

Chromite consumption decreased 30% in July 1996 compared with that of the previous month's revised data, according to the U.S. Geological Survey. Net production of chromium ferroalloys and metal in July decreased 44% compared with revised data for June, and consumption of chromium ferroalloys and metal in July increased by 4% compared to data for June. Chromite stocks decreased 4% over the same period. At the July rate of consumption, chromium stocks represented 10 months of domestic supply. Chromium ferroalloys and metals stocks increased 35% compared with data for June. At the July rate of consumption, chromium ferroalloys and metal stocks represented 1.4 months of domestic supply.

Included in this Mineral Industry Surveys are: U.S. consumption and stocks of chromite; U.S. net production, net shipments, and stocks of chromium materials; U.S. consumption by end use and consumer stocks of chromium ferroalloys and metal for June and July; U.S. Government inventory; and foreign trade for June.

Update:--The Defense National Stockpile Center (DNSC) reported the sale of 33,000 tons of high-carbon ferrochromium and ferrochromiumsilicon. Part of this sale was for fiscal year 1997. DNSC expected to offer 6,000 tons of chromium ferroalloys in September 1996. For further information contact: Defense National Stockpile Center, 8725 John J. Kingman Road, Suite 3339, Fort Belvoir, VA 22060-6223. Persons may obtain more information from Mr. Peter Roman at (703) 767-6490.

TABLE 1
U.S. SALIENT CHROMIUM STATISTICS 1/

(Metric tons, gross weight unless otherwise noted)

	1995	1996				
	Year total	Apr.	May	June	July	Jan. - July
Production:						
Chromium ferroalloys and metal: 2/						
Net production:						
Gross weight	72,500	5,480	4,770	3,450	1,930	34,100
Chromium content	49,500	3,810	3,360	2,450	1,320	23,900
Net shipments	72,100	5,330	4,310	2,110	2,240	34,800
Stainless steel production 3/	2,030,000	NA	NA	NA	NA	NA
Components of U.S. supply:						
Stainless steel scrap receipts	663,000	48,600	46,100 r/	48,500 r/	51,700	357,000
Imports for consumption:						
Chromite ore	253,000	28,600	50,100	15,800	NA	107,000 4/
Chromium ferroalloys 5/	495,000	62,700	62,900	25,800	NA	260,000 4/
Chromium metal 6/	7,040	894	780	631	NA	4,830 4/
Stainless steel	NA	NA	NA	NA	NA	NA
Stainless steel scrap	43	4	5	4	NA	26 4/
Distribution of U.S. supply:						
Consumption:						
Chromite ore	356,000 7/	29,600	30,400	22,500 r/	15,700	193,000
Chromium ferroalloys & metal	283,000	22,200 r/	23,300 r/	22,000	22,800	166,000
Exports:						
Chromite ore	17,800	17,100	1,730	37,900	NA	62,000 4/
Chromium ferroalloys	9,360	734	472	490	NA	4,170 4/
Chromium metal	714	165	76	143	NA	638 4/
Stainless steel	NA	NA	NA	NA	NA	NA
Stainless steel scrap	368	37	20	20	NA	133 4/
Stocks at end of period:						
Industry:						
Chromite ore:						
Chemical and metallurgical	194,000	143,000	159,000	160,000	154,000	XX
Refractory	10,900	9,050	8,770	8,510 r/	8,080	XX
Total	205,000	152,000	167,000	169,000	162,000	XX
Chromium ferroalloys and metal:						
Producer	8,430	6,190	6,650	8,000	7,690	XX
Consumer	10,700	14,500 r/	11,800	12,300	24,100	XX
Government Stockpile:						
Chromite ore	1,320,000	1,270,000	1,240,000	1,200,000	1,200,000	XX
Chromium ferroalloys	1,070,000	1,070,000	1,070,000	1,070,000	1,070,000	XX
Chromium metal	7,690	7,690	7,690	7,690	7,690	XX

r/ Revised. NA Not available. XX Not applicable.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes low- and high-carbon ferrochromium, chromium concentrate, ferrochromium-silicon, chromium metal, and other miscellaneous alloys.

3/ Data on stainless steel production from American Iron and Steel Institute, quarterly production of stainless and heat resisting raw steel.

4/ Includes data for January through June; July not available at time of publication.

5/ Includes high-, medium-, and low-carbon ferrochromium and ferrochromium-silicon.

6/ Includes waste and scrap and other.

7/ Includes withheld data for February through December.

TABLE 2
U.S. CONSUMPTION, BY END USE, AND CONSUMER STOCKS OF
CHROMIUM FERROALLOYS AND METAL IN JUNE 1996 1/

(Metric tons, gross weight)

End use	Ferrochromium		Ferro- chromium silicon	Other	Total	Jan. through June
	Low- carbon	Medium- and high- carbon				Total 2/
Steel:						
Carbon	279	284	3	2	568	3,630
Stainless and heat resisting	407	13,500	2,690	W	16,600	103,000
Full alloy	306	1,790	89	5	2,190	13,800
High-strength low-alloy and electric	91	183	593	--	867	5,010
Tool	W	402	--	W	402	1,710
Cast irons	W	132	1	W	133	808
Superalloys	187	480	--	233	900	4,840
Alloys:						
Welding materials 3/	--	1	--	2	3	16
Other alloys 4/	34	W	--	44	79	337
Miscellaneous and unspecified	197	(5/)	--	21	218	9,770
Total: 6/ gross weight	1,500	16,800	3,380	307 7/	22,000	XX
Chromium content	1,010	10,100	953	279	12,300	XX
Stocks, June 30, 1996	1,440	10,100	1,020	247 8/	12,800	XX
Jan. through June: 2/						
Total	9,480	109,000	22,900	2,150 9/	XX	143,000
Chromium content	6,380	62,600	7,980	1,930	XX	78,900

W Withheld to avoid disclosing company proprietary data; included in "Miscellaneous and unspecified." XX Not applicable.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes revised data from previous months.

3/ Includes structural and hard-facing materials.

4/ Includes cutting materials and magnetic, aluminum, copper, nickel, and other alloys.

5/ Withheld to avoid disclosing company proprietary data.

6/ Includes estimates.

7/ Includes 245 tons of chromium metal.

8/ Includes 175 tons of chromium metal.

9/ Includes 1,700 tons of chromium metal.

TABLE 3
U.S. CONSUMPTION, BY END USE, AND CONSUMER STOCKS OF
CHROMIUM FERROALLOYS AND METAL IN JULY 1996 1/

(Metric tons, gross weight)

End use	Ferrochromium		Ferro- chromium silicon	Other	Total	Jan. through July
	Low- carbon	Medium- and high- carbon				Total 2/
Steel:						
Carbon	340	296	8	1	645	4,270
Stainless and heat resisting	719	13,700	3,170	W	17,600	121,000
Full alloy	327	1,780	86	4	2,200	16,000
High-strength low-alloy and electric	93	170	574	--	836	5,850
Tool	W	302	W	--	302	2,010
Cast irons	W	134	1	W	135	943
Superalloys	227	320	--	276	823	5,660
Alloys:						
Welding materials 3/	--	1	--	2	3	19
Other alloys 4/	34	W	--	46	81	418
Miscellaneous and unspecified	144	(5/)	(5/)	(5/)	144	9,990
Total: 6/ gross weight	1,890	16,700	3,840	328 7/	22,800	XX
Chromium content	1,180	10,100	1,380	307	13,000	XX
Stocks, July 31, 1996	1,540	20,900	1,420	254 8/	24,100	XX
Jan. through July: 2/						
Total	11,400	125,000	26,800	2,510 9/	XX	166,000
Chromium content	7,560	72,800	9,370	2,250	XX	91,900

W Withheld to avoid disclosing company proprietary data; included in "Miscellaneous and unspecified." XX Not applicable.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes revised data from previous months.

3/ Includes structural and hard-facing materials.

4/ Includes cutting materials and magnetic, aluminum, copper, nickel, and other alloys.

5/ Withheld to avoid disclosing company proprietary data.

6/ Includes estimates.

7/ Includes 279 tons of chromium metal.

8/ Includes 180 tons of chromium metal.

9/ Includes 1,980 tons of chromium metal.

TABLE 4
U.S. GOVERNMENT STOCKPILE INVENTORY 1/ OF CHROMIUM MATERIALS 2/

(Metric tons)

Period	Chromite ore			Chromium ferroalloys			Chromium metal	
	Chemical	Metal-lurgical	Re-fractory	High-carbon ferro-chromium	Low-carbon ferro-chromium	Ferro-chromium silicon	Alumino-thermic	Electro-lytic
1995:								
July	220,000	835,000	333,000	738,000	283,000	52,900	2,670	5,020
August	220,000	823,000	333,000	738,000	283,000	52,900	2,670	5,020
September	220,000	817,000	333,000	738,000	283,000	52,900	2,670	5,020
October	220,000	792,000	333,000	738,000	283,000	52,900	2,670	5,020
November	220,000	792,000	333,000	738,000	283,000	52,900	2,670	5,020
December	220,000	773,000	328,000	738,000	283,000	52,900	2,670	5,020
1996:								
January	220,000	750,000	328,000	738,000	283,000	52,900	2,670	5,020
February	220,000	739,000	328,000	738,000	283,000	52,900	2,670	5,020
March	220,000	722,000	328,000	738,000	283,000	52,900	2,670	5,020
April	220,000	717,000	328,000	738,000	283,000	52,900	2,670	5,020
May	220,000	694,000	328,000	738,000	283,000	52,900	2,670	5,020
June	220,000	658,000	327,000	738,000	283,000	52,900	2,670	5,020
July	220,000	655,000	322,000	738,000	283,000	52,900	2,670	5,020

1/ Includes specification and non-specification grade materials and materials set aside for disposal but not yet shipped.

2/ Data are rounded to three significant digits.

Source: National Defense Stockpile Center.

TABLE 5
U.S. EXPORTS OF CHROMITE ORE, CHROMIUM FERROALLOYS AND METAL 1/

Period	Chromite ore		Chromium ferroalloys 2/			Chromium metal 3/	
	Gross weight (metric tons)	Value (thousands)	Gross weight (metric tons)	Chromium content (metric tons)	Value (thousands)	Gross weight (metric tons)	Value (thousands)
1995:							
June	2,020	\$321	1,100	648	\$1,530	49	\$599
July	1,260	226	635	381	957	69	418
August	1,100	213	685	403	1,070	26	329
September	1,350	294	876	530	1,240	61	652
October	1,140	228	923	560	1,270	42	616
November	1,330	425	591	353	855	48	424
December	1,420	205	528	289	639	157	1,520
Total	17,800	3,430	9,360	5,540	12,500	714	7,820
1996:							
January	1,740	427	885	519	1,120	86	1,000
February	1,700	407	887	536	1,230	44	618
March	1,840	484	669	399	894	124	1,450
April	17,100 4/	2,280 4/	734	444 r/	843	165	1,530
May	1,730	1,160	472	288	597	76	863
June	37,900 4/	4,270 4/	490	291	583	143	1,110
Total	62,000	9,030	4,140	2,480	5,270	638	6,570

r/ Revised.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes low-, medium-, and high-carbon ferrochromium, and ferrochromium-silicon.

3/ Includes wrought and unwrought and waste and scrap.

4/ All or part of these data have been referred to the Bureau of the Census for verification.

Source: Bureau of the Census.

TABLE 6
U.S. IMPORTS FOR CONSUMPTION OF CHROMITE ORE,
FERROCHROMIUM, AND CHROMIUM METAL 1/

(Metric tons)

	1995	1996			
	Jan. - Dec.	Apr.	May	June	Jan. - June
Chromite ore:					
Not more than 40% chromic oxide:					
Gross weight	11,600	--	15	5,520	7,990
Chromic oxide content	4,120	--	6	1,820	2,640
More than 40% but less than 46% chromic oxide:					
Gross weight	14,800	--	15,000	--	15,000
Chromic oxide content	6,110	--	6,570	--	6,570
46% or more chromic oxide:					
Gross weight	226,000	28,600	35,100	10,300	84,200
Chromic oxide content	109,000	13,400	16,300	4,850	39,400
Total, all grades:					
Gross weight	253,000	28,600	50,100	15,800	107,000
Chromic oxide content	119,000	13,400	22,900	6,670	48,600
Ferrochromium:					
Low-carbon: 2/					
Gross weight	65,800	9,040	5,740	9,030	39,000
Chromium content	42,800	5,360	3,850	5,740	24,200
Medium-carbon: 3/					
Gross weight	7,570	--	--	--	36
Chromium content	4,930	--	--	--	23
High-carbon: 4/					
Gross weight	422,000	53,700	57,200	16,800	221,000
Chromium content	254,000	30,500	33,000	10,100	128,000
Total, all grades:					
Gross weight	495,000	62,700	62,900	25,800	260,000
Chromium content	301,000	35,900	36,900	15,900	153,000
Chromium metal:					
Other than waste and scrap	6,930	894	763	631	4,790
Waste and scrap	109	--	17	(5/)	34
Total, all grades	7,040	894	780	631	4,830

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Ferrochromium containing not more than 3% carbon.

3/ Ferrochromium containing more than 3% but not more than 4% carbon.

4/ Ferrochromium containing more than 4% carbon.

5/ Less than 1/2 unit.

Source: Bureau of the Census.

TABLE 7
U.S. IMPORTS FOR CONSUMPTION OF CHROMITE ORE IN JUNE 1996,
BY GRADE AND BY COUNTRY 1/

Country	June			January - June		
	Gross weight (metric tons)	Cr ₂ O ₃ (metric tons)	Value 2/ (thousands)	Gross weight (metric tons)	Cr ₂ O ₃ (metric tons)	Value 2/ (thousands)
Not more than 40% chromic oxide:						
Canada	20	8	\$3	20	8	\$3
Philippines	5,500	1,820	696	7,940	2,620	1,060
Venezuela	--	--	--	31	12	11
Total	5,520	1,820	699	7,990	2,640	1,070
More than 40% but less than 46% chromic oxide:						
South Africa	--	--	--	15,000	6,570	1,510
46% or more chromic oxide:						
South Africa	10,300	4,850	1,030	84,200	39,400	7,500
Total, all grades:						
Canada	20	8	3	20	8	3
Philippines	5,500	1,820	696	7,940	2,620	1,060
South Africa	10,300	4,850	1,030	99,200	45,900	9,010
Venezuela	--	--	--	31	12	11
Total	15,800	6,670	1,730	107,000	48,600	10,100

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Customs import value generally represents a value in the foreign country and therefore excludes U.S. import duties, freight, insurance and other charges incurred in bringing the merchandise to the United States.

Source: Bureau of the Census.

TABLE 8
U.S. IMPORTS FOR CONSUMPTION OF FERROCHROMIUM IN JUNE 1996,
BY GRADE AND BY COUNTRY 1/

Country	June			January - June		
	Gross weight (metric tons)	Chromium content (metric tons)	Value 2/ (thousands)	Gross weight (metric tons)	Chromium content (metric tons)	Value 2/ (thousands)
High - carbon ferrochromium: 3/						
Albania	--	--	--	5,000	3,010	\$4,110
China	--	--	--	7,760	4,980	5,570
Croatia	--	--	--	9,430	5,880	6,110
Estonia	--	--	--	8,310	5,400	5,360
Finland	--	--	--	9,020	4,790	4,820
Germany	19	14	\$38	19	14	38
India	--	--	--	4,610	2,870	3,120
Japan	--	--	--	18	12	25
Kazakstan	11,500	7,500	6,620	61,500	36,400	36,800
Russia	--	--	--	17,500	9,370	13,200
South Africa	5,220	2,630	2,520	48,700	24,800	24,200
Turkey	--	--	--	29,000	18,000	20,500
United Kingdom	--	--	--	480	301	365
Zimbabwe	--	--	--	19,900	12,600	15,200
Total	16,800	10,100	9,180	221,000	128,000	139,000
Medium - carbon ferrochromium: 4/						
Philippines	--	--	--	36	23	47
Low - carbon ferrochromium: 5/						
China	1,560	1,020	2,290	5,860	3,880	9,180
Croatia	--	--	--	20	13	17
Germany	1,390	972	3,200	4,700	3,300	10,600
Japan	48	34	129	159	110	374
Kazakstan	--	--	--	92	63	131
Russia	3,740	2,400	5,510	10,800	7,080	16,000
South Africa	1,970	1,080	1,220	14,900	8,240	12,500
Turkey	300	220	627	501	368	1,040
United Kingdom	18	14	42	54	37	87
Zimbabwe	--	--	--	1,960	1,160	1,750
Total	9,030	5,740	13,000	39,000	24,200	51,700
Total, all grades:						
Albania	--	--	--	5,000	3,010	4,110
China	1,560	1,020	2,290	13,600	8,860	14,700
Croatia	--	--	--	9,450	5,900	6,130
Estonia	--	--	--	8,310	5,400	5,360
Finland	--	--	--	9,020	4,790	4,820
Germany	1,410	986	3,240	4,710	3,310	10,700
India	--	--	--	4,610	2,870	3,120
Japan	48	34	129	177	122	398
Kazakstan	11,500	7,500	6,620	61,600	36,400	36,900
Philippines	--	--	--	36	23	47
Russia	3,740	2,400	5,510	28,300	16,400	29,200
South Africa	7,190	3,700	3,740	63,600	33,000	36,700
Turkey	300	220	627	29,500	18,400	21,500
United Kingdom	18	14	42	534	338	453
Zimbabwe	--	--	--	21,900	13,800	16,900
Total	25,800	15,900	22,200	260,000	153,000	191,000

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Customs import value generally represents a value in the foreign country and therefore excludes U.S. import duties, freight, insurance and other charges incurred in bringing the merchandise to the United States.

3/ Ferrochromium containing more than 4% carbon.

4/ Ferrochromium containing more than 3% but not more than 4% carbon.

5/ Ferrochromium containing not more than 3% carbon.

Source: Bureau of the Census.

TABLE 9
U.S. IMPORTS FOR CONSUMPTION OF CHROMIUM METAL IN
JUNE 1996, BY GRADE AND BY COUNTRY 1/

Country	June		January - June	
	Gross weight (metric tons)	Value 2/ (thousands)	Gross weight (metric tons)	Value 2/ (thousands)
Waste and scrap:				
Canada	--	--	1	\$7
China	--	--	17	103
Russia	(3/)	2	(3/)	2
Sweden	--	--	16	69
Total	(3/)	2	34	182
Other than waste and scrap:				
Australia	(3/)	2	(3/)	2
China	76	448	706	4,170
France	94	772	755	5,870
Germany	31	281	95	1,000
Hong Kong	18	74	52	284
India	--	--	(3/)	11
Japan	12	529	177	3,070
Korea, Republic of	2	8	2	8
Netherlands	--	--	(3/)	2
Portugal	--	--	2	106
Russia	291	1,840	2,340	13,600
Spain	--	--	1	31
Switzerland	(3/)	2	4	13
Taiwan	1	8	3	52
United Kingdom	104	858	658	5,370
Total	631	4,830	4,790	33,600
Total, all grades:				
Australia	(3/)	2	(3/)	2
Canada	--	--	1	7
China	76	448	724	4,270
France	94	773	755	5,870
Germany	31	281	95	1,000
Hong Kong	18	74	52	284
India	--	--	(3/)	11
Japan	12	529	177	3,070
Korea, Republic of	2	8	2	8
Netherlands	--	--	(3/)	2
Portugal	--	--	2	106
Russia	291	1,850	2,340	13,600
Spain	--	--	1	31
Sweden	--	--	16	69
Switzerland	(3/)	2	4	13
Taiwan	1	8	3	52
United Kingdom	104	858	658	5,370
Total	631	4,830	4,830	33,800

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Customs import value generally represents a value in the foreign country and therefore excludes U.S. import duties, freight, insurance and other charges incurred in bringing the merchandise into the United States.

3/ Less than 1/2 unit.

Source: Bureau of the Census.